



5

# PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re the application of:

Attorney Docket No.: 2842.08US01

Chikao Nagasaka et al.

Application No.: 10/087,595

COPY OF PAPERS  
ORIGINALLY FILED

Examiner: Unknown

Filed: March 1, 2002

Group Art Unit: Unknown

For: PARKING LOCK RELEASING DEVICE

## PRELIMINARY AMENDMENT

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Prior to examination, please amend the above-identified application as follows:

### In the Claims

The following are the pending claims in the application:

1. A parking lock state releasing apparatus for a vehicle with a transmission control device, wherein the transmission control device has a shifting body and detects an operating state of the shifting body, wherein the transmission control device shifts a connecting state of a transmission based on the detection result, the apparatus comprising:

a releasing switch, which is located in a passenger compartment; and

a releasing means, wherein the releasing means generates gas by causing ignition in response to operation of the releasing switch and changes the parking lock state of the transmission to the release state using the pressure of the gas.

2. The parking lock state releasing apparatus according to claim 1, further comprising an actuation permitting means, wherein the actuation permitting means permits or prohibits actuation of the releasing means in response to the operation of the releasing switch.

2002-05-06 10:00:00

3. A parking lock state releasing apparatus for a vehicle with a transmission control device, wherein the transmission control device has a shifting body and detects an operating state of the shifting body, wherein the transmission control device shifts a connecting state of a transmission based on the detection result, the apparatus comprising:

a parking lock member, which is located in the transmission, wherein the parking lock member mechanically locks wheels of the vehicle by means of the transmission;

a releasing switch, which is located in a passenger compartment; and

an ignition drive device, wherein the ignition drive device generates gas by causing ignition in response to operation of the releasing switch;

wherein the parking lock state of the transmission is changed to the release state by actuating the parking lock member using the pressure of the gas in the ignition drive device.

4. The parking lock state releasing apparatus according to claim 3, wherein the ignition drive device includes a gas generating device for generating gas and a piston driven by the pressure of the gas, and the parking lock member is actuated in accordance with driving of the piston.

5. The parking lock state releasing apparatus according to claim 3, wherein a parking brake lever is located in the passenger compartment, and the releasing switch is located in the vicinity of the parking brake lever and the shifting body.

6. The parking lock state releasing apparatus according to claim 3, wherein the ignition drive device includes a driver circuit, and the driver circuit supplies power to the gas generating device to actuate the gas generating device.

7. The parking lock state releasing apparatus according to claim 6, wherein the driver circuit includes an electrolytic capacitor, and the electrolytic capacitor supplies the power to the gas generating device.

8. A parking lock state releasing apparatus for a vehicle with a transmission control device, wherein the transmission control device has a shifting body and detects an operating state of the shifting body, wherein the transmission control device shifts a connecting state of a transmission based on the detection result, the apparatus comprising:

a parking lock member, which is located in the transmission, wherein the parking lock member mechanically locks wheels of the vehicle by means of the transmission; and

a power transmitting member, wherein the power transmitting member has a proximal end connected to the parking lock member of the transmission and a distal end connectible to a conventional movable member provided in the vehicle;

wherein the power transmitting member is driven in response to operation of the movable member, and the parking lock state of the transmission is changed to the release state in accordance with the driving of the power transmitting member.

9. The parking lock state releasing apparatus according to claim 8, wherein the distal end of the power transmitting member is connected to a foot pedal or a parking brake lever or a door that are located at a driver seat, and the power transmitting member is driven by force for operating a corresponding one of the foot pedal or the parking brake lever or the door.

10. A parking lock state releasing apparatus for a vehicle with a transmission control device, wherein the transmission control device has a shifting body and detects an operating state of the shifting body, wherein the transmission control device shifts a connecting state of a transmission based on the detection result, the apparatus comprising:

a parking lock member, which is located in the transmission, wherein the parking lock member mechanically locks wheels of the vehicle by means of the transmission; and

a power transmitting member, wherein the power transmitting member has a proximal end connected to the parking lock member of the transmission and a distal end connectible to a movable member provided in the vehicle;

wherein operation force of the movable member is amplified by a lever effect when the movable member is operated, the power transmitting member is driven by the

amplified force, and the parking lock state of the transmission is changed to the release state by the power transmitting member.

11. The parking lock state releasing apparatus according to claim 10, wherein the distal end of the power transmitting member is connected to a foot pedal or a parking brake lever or a door that are located at a driver seat, and the power transmitting member is driven by force for operating a corresponding one of the foot pedal or the parking brake lever or the door.

Please add new claims 12-18 as follows:

12. (New) A parking lock state releasing apparatus for a vehicle with a transmission control device and a transmission having a parking lock state, wherein the transmission control device has a shifting body and detects an operating state of the shifting body, wherein the transmission control device shifts a connecting state of the transmission based on the detected operating state, the parking lock state releasing apparatus comprising:

a releasing switch, which is located in a passenger compartment; and

a releasing means, wherein the releasing means generates gas in response to operation of the releasing switch and changes the parking lock state of the transmission using the pressure of the gas.

13. (New) The parking lock state releasing apparatus according to claim 12, further comprising an actuation permitting means, wherein the actuation permitting means permits or prohibits actuation of the releasing means in response to the operation of the releasing switch.

14. (New) A parking lock state releasing apparatus for a vehicle with a transmission control device, a transmission having a parking lock state, and a parking lock member located in the transmission, wherein the parking lock member mechanically locks wheels of the vehicle by means of the transmission; wherein the transmission control device has a shifting body and detects an operating state of the shifting body; and wherein the transmission control device shifts

a connecting state of the transmission based on the detected operating state; the parking lock state releasing apparatus comprising:

a releasing switch, which is located in a passenger compartment; and

an ignition drive device, wherein the ignition drive device generates gas by causing ignition in response to operation of the releasing switch;

wherein parking lock state of the transmission is changed by actuating the parking lock member using the pressure of the gas in the ignition drive device.

15. (New) The parking lock state releasing apparatus according to claim 14, wherein the ignition drive device includes a gas generating device for generating gas and a piston driven by the pressure of the gas, and the parking lock member is actuated in accordance with driving of the piston.

16. (New) The parking lock state releasing apparatus according to claim 14, wherein a parking brake lever is located in the passenger compartment, and the releasing switch is located in the vicinity of the parking brake lever and the shifting body.

17. (New) The parking lock state releasing apparatus according to claim 14, wherein the ignition drive device includes a driver circuit, and the driver circuit supplies power to the gas generating device to actuate the gas generating device.

18. (New) The parking lock state releasing apparatus according to claim 17, wherein the driver circuit includes an electrolytic capacitor, and the electrolytic capacitor supplies the power to the gas generating device.

#### REMARKS

New claims 12 through 18 find support in original claims 1 through 11 and the specification.

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,



Douglas J. Christensen  
Registration No. 35,480

Customer No. 24113  
Patterson, Thunte, Skaar & Christensen, P.A.  
4800 IDS Center  
80 South 8th Street  
Minneapolis, Minnesota 55402-2100  
Telephone: (612) 349-3001

*Please grant any extension of time necessary for entry; charge any fee due to Deposit Account No. 16-0631.*

CERTIFICATE OF MAILING

I hereby certify that this document is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on

June 3, 2002  
Date of Deposit

Douglas J. Christensen  
Douglas J. Christensen



Application No. 10/087,595

ATTACHMENT  
REDLINED AMENDMENT

Claims As Amended

Please add new claims 12-18 as follows:

12. (New) A parking lock state releasing apparatus for a vehicle with a transmission control device and a transmission having a parking lock state, wherein the transmission control device has a shifting body and detects an operating state of the shifting body, wherein the transmission control device shifts a connecting state of the transmission based on the detected operating state, the parking lock state releasing apparatus comprising:

a releasing switch, which is located in a passenger compartment; and

a releasing means, wherein the releasing means generates gas in response to operation of the releasing switch and changes the parking lock state of the transmission using the pressure of the gas.

13. (New) The parking lock state releasing apparatus according to claim 12, further comprising an actuation permitting means, wherein the actuation permitting means permits or prohibits actuation of the releasing means in response to the operation of the releasing switch.

14. (New) A parking lock state releasing apparatus for a vehicle with a transmission control device, a transmission having a parking lock state, and a parking lock member located in the transmission, wherein the parking lock member mechanically locks wheels of the vehicle by means of the transmission; wherein the transmission control device has a shifting body and detects an operating state of the shifting body; and wherein the transmission control device shifts a connecting state of the transmission based on the detected operating state; the parking lock state releasing apparatus comprising:

a releasing switch, which is located in a passenger compartment; and

an ignition drive device, wherein the ignition drive device generates gas by causing ignition in response to operation of the releasing switch;

wherein parking lock state of the transmission is changed by actuating the parking lock member using the pressure of the gas in the ignition drive device.

15. (New) The parking lock state releasing apparatus according to claim 14, wherein the ignition drive device includes a gas generating device for generating gas and a piston driven by the pressure of the gas, and the parking lock member is actuated in accordance with driving of the piston.

16. (New) The parking lock state releasing apparatus according to claim 14, wherein a parking brake lever is located in the passenger compartment, and the releasing switch is located in the vicinity of the parking brake lever and the shifting body.

17. (New) The parking lock state releasing apparatus according to claim 14, wherein the ignition drive device includes a driver circuit, and the driver circuit supplies power to the gas generating device to actuate the gas generating device.

18. (New) The parking lock state releasing apparatus according to claim 17, wherein the driver circuit includes an electrolytic capacitor, and the electrolytic capacitor supplies the power to the gas generating device.



COPY OF PAPERS  
ORIGINALLY FILED

STATEMENT

I, Futoshi Suzuki, a citizen of Japan, residing at 3D, Kopo-Shimizu, 1839 Noritake, Gifu-shi, Gifu-ken, Japan, hereby state that I am the translator of the attached document and I believe it is an accurate translation of the U.S. Patent Application Serial No. 10/087,595 entitled PARKING LOCK RELEASING DEVICE, filed on March 1, 2002, in the name of Chikao Nagasaka, Masaki Hayashi, and Noriyasu Syamoto.

*Futoshi Suzuki*  
Futoshi SUZUKI

Translator

Dated this 18th date of April, 2002